COMMUNITY NEWS

JSC reaches out to academe

NASA is stepping up its effort to collaborate with universities across the country on the research it does on space missions, biotechnology, and information technology. In the process, the agency's space-and-research centers are establishing stronger ties with campus scientists.

As part of this effort, JSC held the first-of-its-kind Experimental Program to Stimulate Competitive Research (EPSCoR) Expo May 8-9 at the Gilruth Center. EPSCoR representatives, about 40 university directors, faculty members, and researchers engaged in space-related topics, attended the conference.

The purpose was to acquaint attendees with JSC researchers and their current fields of study so that they might match NASA research interests with their own. If they see strong correlations, later this year they will be able to submit proposals to receive Headquarters funds to collaborate with NASA researchers on projects key to the agency's success.

"Over the years, JSC has found that including the academic community in our work can benefit everyone involved," said JSC University Affairs Officer Donn Sickorez. "We benefit from their insights and hard work; they benefit from our practical focus and depth of experience. The EPSCoR Program is an excellent example of how we can involve yet another segment of college and university faculty and students in the nation's space program."

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The event began with an overview of JSC's research endeavors. Representatives from the center's Space and Life Sciences and Engineering directorates gave presentations on ongoing research at JSC that is critical to the center's success.

Dr. Charles Lloyd, manager, Biomedical Research and Countermeasures Program, gave an overview of current research in several areas including space medicine, occupational medicine, human factors, science payloads, and biotechnology. He also reviewed key activities of the National Space Biomedical Research Institute (NSBRI), the consortium led by Baylor College of Medicine. The NSBRI allows universities from across the country to take on the task of developing countermeasures or mitigating measures for potential risks involved in long-duration space flight.

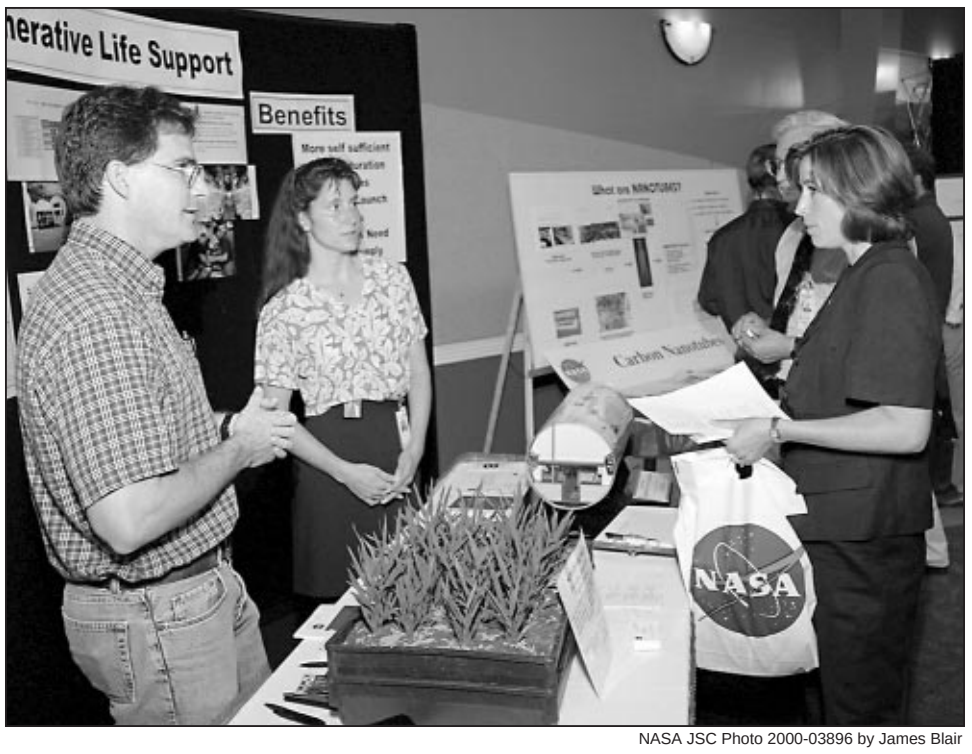
Of particular note for the visiting EPSCoR representatives was Dr. Lloyd's review of 55 critical risks to long-duration human space flight for which the directorate needs to develop countermeasures or mitigating factors in order for human beings to be sent on extended space journeys, including potential missions to Mars. The study of each of these risks offers avenues for future collaborative research between NASA and academe.

Dr. Wendell Mendell, deputy chief of JSC's Earth Sciences and Solar System Exploration Division, offered additional avenues for collaborative research. He covered numerous topics including research endeavors in Earth sciences, orbital debris, planetary science, and the study and curation of astromaterials.

John Connolly of JSC's Exploration Office said that research in the Engineering Directorate is focused on projects planned beyond the International Space Station including returning to the Moon and going on to Mars. He described a roadmap of critical technologies ranging from propulsion systems and information technology to life support systems that the directorate is working on for keeping people alive and well for 100- to 300-day missions.

According to Connolly, academe will play a key role in developing these technologies. "When we think about the academic community, we think of you as coming in at the very forefront of what we need to develop."

Attendees appreciated the opportunity to find out more about the EPSCoR Program and to check out potential areas for collaborative research.



NASA JSC Photo 2000-03896 by James Blair

Lockheed Martin's Michael Alazraki and Karen Meyers discuss regenerative life support systems for long-duration space flights with Dr. Rebecca Lutte, professor of aviation at the University of Nebraska at Omaha Aviation Institute.

"I am attending on behalf of the University of Nebraska at Omaha," said Dr. Rebecca Lutte, professor of aviation at the University of Nebraska at Omaha Aviation Institute. "We are an EPSCoR research grant facility and coordinate the NASA research for the state of Nebraska. We are here to look at increasing collaboration through NASA. The university right now is mostly involved with the Small Aircraft Transportation System Program. So we are looking at some areas in general aviation and increasing air transportation to rural parts of our state."

Attendees were able to meet JSC scientists and researchers and visit laboratories across the center. Mini-tours of the X-38, TransHab, Mission Control Center, and BIO-Plex Facility were also on the agenda. Exhibits ranging from Inspection 2000 to the DeBakey ventricular assist device were also on display in the Gilruth Center.

The EPSCoR Program is designed to allow states of modest research infrastructure to develop a more competitive research and development base. In 1978, the National Science Foundation designated Alabama, Arkansas, Connecticut, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, North Dakota, Oklahoma, South Carolina, South Dakota, Vermont, West Virginia, and Wyoming as EPSCoR states. Puerto Rico was also included. In 1992, Congress asked NASA to establish a NASA EPSCoR Program and granted $10 million to help EPSCoR states increase their research and development base. Under the terms of the 2001 EPSCoR competition, each state will be invited to propose up to three research projects totaling approximately $700,000 annually.

NASA codes and centers will publish collaborative research opportunities in a work titled *Research Compendium* due out in August. Any principal investigator who leads a research group at one of the EPSCoR states will be able to submit proposals through each state's EPSCoR system. Winning proposals will be announced in spring 2001. ■

A Glimpse of the Past ...Visions of the Future!

Johnson Space Center celebrates American Heritage Week 2000

Celebrate JSC's multicultural workforce during American Heritage Week June 26 through June 30. Special events in the Bldg. 3 cafeteria each weekday will highlight unique traditions and customs that distinguish the various backgrounds of JSC's more than 18,000 employees.

A parade led by the Forest Brook High School Marching Band will kick off the Grand Finale Friday, June 30, as exhibits and entertainers representing a cornucopia of cultures transcend the Gilruth Center into a global "village fair." The International Space Station trailers will also be open for tours at the site.

Admission is free for Johnson Space Center employees, contractors, and their families. To volunteer for the Grand Finale event or for more information regarding American Heritage Week, contact Patricia Burke at x30606 or visit the American Heritage Week Web site at http://www4.jsc.nasa.gov/EOPO/. ■

JSC observes Cinco de Mayo

JSC held its annual Cinco de Mayo Observance May 5 in the Bldg. 3 cafeteria. Guitarist Juan Manuel Traslavina headlined the festivities.

Traslavina has been playing the guitar for more than 20 years. He has performed throughout the United States, Europe, and the Caribbean. He recently released his second all-original jazz compact disc entitled "Liberation."

Traslavina works for SAIC supporting the SR&QA contract and has supported JSC for 12 years.

For more information about Traslavina, visit: www.ArtistUnlimited.com.